AGRI 7004 LIVESTOCK PRODUCTION SYSTEMS

Credit Points 10

Legacy Code 301373

Coordinator Sebastian Holmes (https://directory.westernsydney.edu.au/search/name/Sebastian Holmes/)

Description This subject covers the principles of animal production required to develop sustainable and efficient production systems to meet the challenges of domestic and global needs. It will cover the scientific principles (biochemical, anatomical and physiological) that underpin intensive and extensive animal production. These principles will be related to key production parameters and indicators including growth, reproduction, lactation and milk production, fibre production and breeding. Students will apply scientific principles to the planning of production in farming simulation models. Through these simulation programs students will explore production case studies and develop advisory plans. Focus areas include animal health and management, whole farm production systems and the challenges to animal production from changing climate, food safety and quality, consumer requirements and animal welfare.

School Science

Discipline Animal Husbandry

Student Contribution Band HECS Band 1 10cp

Check your fees via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Postgraduate Coursework Level 7 subject

Restrictions

Must be enrolled in a postgraduate program

Learning Outcomes

On successful completion of this subject, students should be able to:

1. Demonstrate an integrative understanding of the principles of clean, green and ethical animal production and its importance to modern agriculture.
2. Critically analyse the major problems associated with the production of wool, meat and dairy products.
3. Apply appropriate research informed techniques in interpreting data to support decisions in animal production.
4. Communicate the conclusions of an animal production report to key stake holders.
5. Address complex ethical issues in animal production in line with regulatory frameworks.

Subject Content

1.The structure and operation of agricultural production industries of Australia
2.Australia?fs role in global food and fibre production
3.The principal factors that determine location, environmental impact, sustainability, profitability and international trade competitiveness in animal production systems
4.The major extensive animal production systems in Australia: beef cattle and sheep, and dairy cattle
5.The major intensive animal production systems in Australia: pigs and poultry, including free range and conventional farming systems
6.Productivity benchmarks in the major production animal systems
7.Chain of production from on-farm to consumer
8.The principles of codes of practice and laws governing production animal systems
9.The principles of animal welfare and situations where there is a particular welfare concern
10.Impact of animal production systems on the environment

Special Requirements

Legislative pre-requisites

Students who opt to enrol in this subject are strongly recommended to obtain a Q-Fever vaccination, and Tetanus vaccination/booster. Students who cannot evidence vaccination may be precluded from activities on the Farm, and/or internships with third parties.

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Type	Length	Percent	Threshold	Individual/ Group Task	Mandatory
Quiz	6 x online quiz – total 3 hours	30	N	Individual	N
Portfolio	Weekly in workshop	20	N	Individual	N
Presentation	2 x 3 minute oral presentation	30	N	Individual	N
Poster	1000 words	20	N	Individual	N

Teaching Periods

Autumn (2025)

Hawkesbury

On-site

Subject Contact Sebastian Holmes (https://directory.westernsydney.edu.au/search/name/Sebastian Holmes/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=AGRI7004_25-AUT_HW_1#subjects)